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Applicant : BANERJEE et al.

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Appl. No. : 09/779,447

Examiner: UNKNOWN

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For : METHODS FOR INHIBITING ANGIOGENESIS

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner of Patents
Washington, D.C. 20231

Sir:

In accordance with the duty of disclosure under 37 C.F.R. §§ 1.56, 1.97, and 1.98, Applicants hereby bring the following information to the attention of the Examiner in charge of the above-identified application, which information is cited and discussed in the specification:

BANERJEE, "Angiogenesis: Characterization of a Cellular Model", Puerto Rico Hlth. Sci. J., 17:327-333 (publication date unknown)

Applicants note that the earliest publication date of the above document is not known. In this regard, although Volume 17(4) of the Puerto Rico Health Science Journal (hereinafter "Vol. 17(4)") has a nominal publication date of December 1998, Applicants have been advised that Vol. 17(4) was not published until after December 1998. In this regard, the attached letter from the Puerto Rico Health Sciences Journal indicates that Vol. 17(4) was received from the printers by the Office of the

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Puerto Rico Health Sciences Journal on January 29, 1999. The attached letter from the Puerto Rico Health Sciences Journal also indicates that Vol. 17(4) was mailed to subscribers on January 29, 1999. However, to the best of Applicants' understanding, the earliest receipt of Vol. 17(4) is February 12, 1999 as shown by the attached "Check-in Report" from the University of Puerto Rico Medical Library. Additionally, Applicants note that Vol. 17(4) did not become available on PubMed until February 24, 1999 as shown by the attached printout from www.ncbi.nlm.nih.

Still further, the following information which is cited and discussed in the specification is brought to the attention of the Examiner:

COCKERILL et al., "Angiogenesis: Model and Modulators", Int Rev Cytol, 159: 113-160 (1995);

FOLKMAN et al., "Angiogenesis", J Biol Chem, 267:10931-10934 (1992);

BECK et al., "Vascular Development: Cellular and Molecular Regulation", FASEB J., 11:365-373 (1997);

BUSSOLINO et al., "Molecular Mechanisms of Blood Vessel Formation", TIBS, 22:251-256 (1997);

FOLKMAN et al., "Induction of Angiogenesis During the Transition from Hyperplasia to Neoplasia", Nature, 339: 58-61 (1989);

FRIEDLANDER et al., "Definition of Two Angiogenic Pathways by Distinct α , Integrins", Science, 270:1500-1502 (1995);

P19850.A06

LIOTTA et al., "Cancer Metastasis and Angiogenesis: an Imbalance of Positive and Negative Regulation", Cell, 64:327-336 (1991);

SACLARIDES et al., "Tumor Angiogenesis and Rectal Carcinoma", Dis. Colon Rectum, 37:921-926 (1994);

SHWEIKI et al., "Patterns of Expression of Vascular Endothelial Factor (VEGF) and VEGF Receptors in Mice Suggest a Role in Hormonally Regulated Angiogenesis", J. Clin. Invest., 91:2235-2243 (1993);

VARTANIAN et al., "Correlation of Intratumoral Endothelial Cell Proliferation with Microvessel Density (Tumor Angiogenesis) and Tumor Cell Proliferation in Breast Carcinoma", Am. J. Pathol., 144:1188-1194 (1994);

FOLKMAN et al., "Angiogenic Factors", Science, 235:442-447 (1987);

FURCHT, "Critical Factors Controlling Angiogenesis: Cell Products, Cell Matrix, and Growth Factors", Lab. Invest., 55:505-509 (1986);

DENEKAMP, "Angiogenesis, Neovascular Proliferation and Vascular Pathophysiology as Targets for Cancer Therapy", Br. J. Radiol., 66:181-196 (1993);

NICOLSON, "Cancer Metastasis", Sci. Am., 240:66-76 (1979);

NAGY et al., "Pathogenesis of Tumor Stroma Generation: a Critical Role for Leaky Blood Vessels and Fibrin Deposition", Biochim Biophys. Acta, 948:305-326 (1989);

MOSCATELLI et al., "Angiogenic Factors Stimulate Plasminogen Activator and Collagenase Production by Capillary Endothelial Cells", J. Cell Biol., 91:201a (1981);

P19850.A06

LIOTTA et al., "The Significance of Hematogenous Tumor Cell Clumps in the Metastatic Process", Cancer Res., 36:889-894 (1976);

FOLKMAN, "Tumor Angiogenesis: Therapeutic Implications", N. Engl. J. Med., 285:1182-1186 (1971);

FOLKMAN, "Clinical Applications of Research on Angiogenesis", N. Engl. J. Med., 333:1757-1763 (1995);

HARRIS et al., "Gene Therapy Through Signal Transduction Pathways and Angiogenic Growth Factors as Therapeutic Targets in Breast Cancer", Cancer, 74:1021-1025 (1994);

INGBER et al., "Synthetic Analogues of Fumagillin that Inhibit Angiogenesis and Suppress Tumor Growth", Nature, 348:555-557 (1990);

HORI et al., "Suppression of Solid Tumor Growth by Immunoneutralizing Monoclonal Antibody Against Human Basic Fibroblast Growth Factor", Cancer Res., 51:6180-6184 (1991);

KIM et al., "Inhibition of Vascular Endothelial Growth Factor-induced Angiogenesis Suppresses Tumor Growth *in vivo*", Nature, 362:841-844 (1993);

MILLAUER et al., "Glioblastoma Growth Inhibited *in vivo* by a Dominant-negative Flk-1 Mutant", Nature, 367:576-579 (1994);

BROOKS et al., "Integrin $\alpha v \beta 3$ Antagonists Promote Tumor Regression by Inducing Apoptosis of Angiogenic Blood Vessels", Cell, 79:1157-1164 (1994);

RAK et al., "Progressive Loss of Sensitivity to Endothelium-derived Growth Inhibitors Expressed by Human Melanoma Cells during Disease Progression", J. Cell Physiol., 159:245-255 (1994);

P19850.A06

HAMADA et al., "Separable Growth and Migration Factors for Large-cell Lymphoma Cells Secreted by Microvascular Endothelial Cells Derived from Target Organs for Metastasis", Br. J. Cancer, 66:349-354 (1992);

FOX et al., "High Levels of uPA and pA-1 are Associated with Highly Angiogenic Breast Carcinomas", J. Pathol., 170:388a (1993);

POLVERINI et al., "Induction of Neovascularization *in vivo* and Endothelial Proliferation *in vitro* by Tumor Associated Macrophages", Lab. Invest., 51:635-642 (1984);

FRATER-SCHRODER et al., "Tumor Necrosis Factor Type α , a Potent Inhibitor of Endothelial Cell Growth *in vitro*, is Angiogenic *in vivo*", Proc. Natl. Acad. Sci (USA), 84:5277-5281 (1987);

SCHREIBER et al., "Transforming Growth Factor- α : a More Potent Angiogenic Mediator than Epidermal Growth Factor", Science, 232:1250-1253 (1986);

HOCKEL et al., "Purified Monocyte-derived Angiogenic Substance (Angiotropin) Induces Controlled Angiogenesis Associated with Regulated Tissue Proliferation in Rabbit Skin", J. Clin. Invest., 82:1075-1090 (1988);

KESSLER et al., "Mast Cells and Tumor Angiogenesis", Intern. J. Can., 18:703-709 (1976);

THORNTON et al., "Human Endothelial Cells: Use of Heparin in Cloning and Long-term Serial Cultivation", Science, 222:623-625 (1983);

DETHLEFSEN et al., "Tumor Growth and Angiogenesis in Wild Type and Mast Cell Deficient Mice", FASEB J., 4:A623 (1990);

P19850.A06

KANDEL et al., "Neovascularization is Associated with a Switch to the Export of bFGF in the Multistep Development of Fibrosarcoma", Cell, 66:1095-1104 (1991);

NGUYEN et al., "Elevated Levels of the Angiogenic Peptide Basic Fibroblast Growth Factor in Urine of Bladder Cancer Patients", J. Natl. Cancer Inst., 85:241-242 (1993);

BROWN et al., "Increased Expression of Vascular Permeability Factor (Vascular Endothelial Growth Factor) and its Receptors in Kidney and Bladder Carcinomas", Am J. Pathol., 143:1255-1262 (1993);

GOTO et al., "Synergistic Effects of Vascular Endothelial Growth Factor and Basic Fibroblast Growth Factor on the Proliferation and Cord Formation of Bovine Capillary Endothelial Cells within Collagen Gels", Lab. Invest., 69:508-517 (1993);

LEIBOVICH et al., "Production of Angiogenic Activity by Human Monocytes Requires an L-arginine/nitric oxide-synthase-dependent Effector Mechanism", Proc. Natl. Acad. Sci (USA), 91:4190-4194 (1994);

BANERJEE, "Microenvironment of Endothelial Cell Growth and Regulation of Protein N-glycosylation", Indian J. Biochem. Biophys., 25:8-13 (1988);

BANERJEE et al., "Biphasic Estrogen Response on Bovine Adrenal Medulla Capillary Endothelial Cell Adhesion, Proliferation and Tube Formation", Mol. Cell Biochem., 177:97-105 (1997);

BOND et al., "Replacement of Residues of 8-22 of Angiogenin with 7-21 of RNase A Selectively Affects Protein Synthesis Inhibition and Angiogenesis", Biochemistry, 29:3341-3349 (1990);

P19850.A06

BOUCK et al., "Coordinate Control of Anchorage Independence, Actin Cytoskeleton and Angiogenesis by Human Chromosome 1 in Hamster-human Hybrids", Cancer Res., 46:5101-5105 (1986);

RASTINEJAD et al., "Regulation of the Activity of a New Inhibitor of Angiogenesis by a Cancer Suppressor Gene", Cell, 56:345-355 (1989);

ZAJCHOWSKI et al., "Suppression of Tumor-forming Ability and Related Traits in MCF - 7 Human Breast Cancer Cells by Fusion with Immortal Mammary Epithelial Cells", Proc. Natl. Acad. Sci (USA), 87:2314-2318 (1990);

O'REILLY et al., "Angiostatin: A Novel Angiogenesis Inhibitor that Mediates the Suppression of Metastases by a Lewis Lung Carcinoma", Cell, 79:315-328 (1994);

BERGERS et al., "Effects of Angiogenesis Inhibitors on Multistage Carcinogenesis in Mice", Science, 284:808-812 (1999);

BROOKS et al., "Requirement of Vascular Integrin $\alpha_v\beta_3$ for Angiogenesis", Science, 264:569-571 (1994);

HANAHAN et al., "Patterns and Emerging Mechanisms of the Angiogenic Switch During Tumorigenesis", Cell, 86:353-364 (1996);

NGUYEN et al., "1-Deoxymannojirimycin Inhibits Capillary Tube Formation *in vitro*, Analysis of N-linked Oligosaccharides in Bovine Capillary Endothelial Cells", J. Biol. Chem., 267:26157-26165 (1992);

P19850.A06

PILI et al., "The α -glucosidase I Inhibitor Castanospermine Alters Endothelial Cell Glycosylation, Prevents Angiogenesis, and Inhibits Tumor Growth", Cancer Res., 55:2920-2926 (1995);

BANERJEE et al., "Is Asparagine-Linked Protein Glycosylation an Obligatory Requirement for Angiogenesis?", Indian J. Biochem. Biophys., 30:389-394 (1993);

NGUYEN et al., "A Role of Sialyl Lewis-X/A Glycoconjugates in Capillary Morphogenesis", Nature, 365:267-269 (1993);

ELBEIN, "Inhibitors of the Biosynthesis and Processing of N-linked Oligosaccharide Chains", Ann. Rev. Biochem., 56:497-534 (1987);

TIGANIS et al., "Functional and Morphological Changes Induced by Tunicamycin in Dividing and Confluent Endothelial Cells", Exp. Cell Res., 198:191-200 (1992);

CHAPMAN et al., "Structure of the Lipid-linked Oligosaccharides that Accumulate in Class E *thy-1*-negative Mutant Lymphomas", Cell, 17:509-515 (1979);

BANERJEE et al., "Amphomycin: Effect of the Lipopeptide Antibiotic on the Glycosylation and Extraction of Dolichyl Monophosphate in Calf Brain Membranes", Biochemistry, 20:1561-1568 (1981);

BANERJEE, "Amphomycin Inhibits Mannosylphosphoryldolichol Synthesis by Forming a Complex with Dolichylmonophosphate", J. Biol. Chem., 264:2024-2028 (1989);

BANERJEE, "A Recent Approach to the Study of Dolichyl Monophosphate Topology in the Rough Endoplasmic Reticulum", Acta Biochimica Polonica, 41:275-280 (1994);

P19850.A06

BANERJEE et al., "Endothelial Cells from Bovine Adrenal Medulla Develop Capillary-like Growth Patterns in Culture", Proc. Natl. Acad. Sci. USA, 82:4702-4706 (1985);

BANERJEE et al., "Microvascular Endothelial Cells from Bovine Adrenal Medulla - A Model for *in vitro* Angiogenesis", Angiogenesis: Models, Modulators and Clinical Applications, pp. 7-18 (1998);

KORNFELD et al., "Assembly of Asparagine-Linked Oligosaccharides", Annu Rev Biochem, 54:631-664 (1985);

HEINEMANN et al., "Amphomycin, a New Antibiotic", Antibiot. Chemother., 3:1239-1242 (1953);

BODANSZKY et al., "Structure of the Peptide Antibiotic Amphomycin", J. Am. Chem. Soc., 95:2352-2357 (1973);

BANERJEE, "Amphomycin: A Tool to Study Protein N-glycosylation", J. Biosci., 11:311-319 (1987);

BANERJEE et al., "Monoclonal Antibody to Amphomycin. A Tool to Study the Topography of Dolichol Monophosphate in the Membrane", Carbohydr. Res., 236:301-313 (1992);

BANERJEE et al., "cAMP-Mediated Protein Phosphorylation of Microsomal Membranes Increases Mannosylphosphodolichol Synthase Activity", Proc Natl Acad Sci (USA), 84:6389-6393 (1987);

ELIAS et al., "Direct Arterial Vascularization of Estrogen-Induced Prolactin-Secreting Anterior Pituitary Tumors", Proc Natl Acad Sci (USA), 81:4549-4553 (1984);

P19850.A06

DAS et al., " β -adrenoreceptors of Multiple Affinities in a Clonal Capillary Endothelial Cell Line and its Functional Implication", Mol. Cell. Biochem., 140:49-54 (1994);

BANERJEE et al., "Protein Kinase Type I Regulates GDP-mannose:dolichylphosphate-O- β -D-mannosyltransferase in the ER", FASEB J., 9:1361a (1995);

COLUSSI et al., "Human and *Saccharomyces cerevisiae* Dolichol Phosphate Mannose Synthases Represent Two Class of the Enzyme, but both Function in *Schizosaccharomyces pombe*", Proc Natl Acad Sci (USA), 94: 7873-7878 (1997);

ORLEAN et al., "Cloning and Sequencing of the Yeast Gene for Dolichol Phosphate Mannose Synthase, an Essential Proteins", J. Biol. Chem., 263:17499-17507 (1988);

MAZHARI-TABRIZI et al., "Cloning and Functional Expression of Glycosyltransferases from Parasitic Protozoans by Heterologous Complementation in Yeast: the Dolichol Phosphate Mannose Synthase from *Trypanosoma brucei brucei*", Biochem. J., 316:853-858 (1996);

BANERJEE, "Regulation of Mannosylphosphoryldolichol Synthase Activity by cAMP-dependent Protein Phosphorylation", Highlights of Modern Biochemistry, pp. 379-388 (1989);

BANERJEE et al., "*In vitro* Phosphorylation of Recombinant Dol-P-Man Synthase from *S. cerevisiae* Enhances its Activity", FASEB J., 12:A1363 (1998);

CARRASQUILLO et al., "Serine 141 is Essential for Dol-P-Man Synthase Activity in *S. cerevisiae*", Glycobiology, 8:93a (1998);

WALKER et al., "A Functional Link Between N-linked Glycosylation and Apoptosis in Chinese Hamster Ovary Cells", Biochem. Biophys. Res. Commun., 250:264-270 (1998);

P19850.A06

ROSENWALD et al., "Control of Carbohydrate Processing: Increased β 1,6-branching in N-linked Carbohydrates of Lec9 CHO Mutants Appears to Arise from a Defect in Oligosaccharide-dolichol Synthesis", Mol. Cell. Biol., 9:914-924 (1989);

U.S. Patent No. 5,766,591;

U.S. Patent No. 5,760,028;

U.S. Patent No. 5,760,029;

U.S. Patent No. 6,130,231;

U.S. Patent No. 6,096,730;

U.S. Patent No. 6,160,166;

U.S. Patent No. 6,146,824;

U.S. Patent No. 6,150,407;

YUE et al., "2-Methoxyestradiol, an Endogenous Estrogen Metabolite, Induces Apoptosis in Endothelial Cells and Inhibits Angiogenesis: Possible Role for Stress Activated Protein Kinase Signaling Pathway and Fas Expression", Molecular Pharmacology, Vol. 51, pp. 951-962 (1997);

GUO et al., "Thrombospondin 1 and Type I Repeat Peptides of Thrombospondin 1 Specifically Induce Apoptosis of Endothelial Cells", Cancer Research, 57:1735-1743 (1997);

U.S. Patent No. 5,382,514;

U.S. Patent No. 5,994,309;

U.S. Patent No. 5,854,205;

U.S. Patent No. 5,837,682;

U.S. Patent No. 5,945,403;

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U.S. Patent No. 6,024,688;

U.S. Patent No. 6,114,355;

U.S. Patent No. 5,985,839;

U.S. Patent No. 5,830,880;

U.S. Patent No. 4,670,394;

PAHL, "Signal Transduction from the Endoplasmic Reticulum to the Cell Nucleus", Physiol. Rev., 79:683-701 (1999);

REDDY et al., "Assembly, Sorting and Exit of Oligomeric Proteins from the Endoplasmic Reticulum", BioEssays, 20:546-554 (1998);

WANG et al., "Signals from the Stressed Endoplasmic Reticulum Induce C/EBP-homologous Protein (CHOP/GADD153)", Mol. Cell. Biol., 16:4273-4280 (1996);

WANG et al., "Cloning of Mammalian Ire1 Reveals Diversity in the ER Stress Responses", EMBO J., 17:5708-5717 (1998);

HARDING et al., "Protein Translation and Folding are Coupled by an Endoplasmic-reticulum-resident Kinase", Nature, 397:271-274 (1999);

BREWER et al., "Mammalian Unfolded Protein Response Inhibits Cyclin D1 Translation and Cell-cycle Progression", Proc. Natl. Acad. Sci (USA), 96:8505-8610 (1999);

NAKAGAWA et al., "Caspase-12 Mediates Endoplasmic-reticulum-Specific Apoptosis and Cytotoxicity by Amyloid- β ", Nature, 403:98-103 (2000);

P19850.A06

POUYSSÉGUR et al., "Induction of Two Transformation-sensitive Membrane Polypeptides in Normal Fibroblasts by a Block in Glycoprotein Synthesis or Glucose Deprivation", Cell, 11:941-947 (1977);

SHIU et al., "Glucose Depletion Accounts for the Induction of Two Transformation-sensitive Membrane Proteins in Rous Sarcoma Virus-transformed Chick Embryo Fibroblasts", Proc. Natl. Acad. Sci. (USA) 74:3840-3844 (1977);

PELUSO et al., "Infection with Paramyxoviruses Stimulates Synthesis of Cellular Polypeptides that are also Stimulated in Cells Transformed by Rous Sarcoma Virus or Deprived of Glucose", Proc. Natl. Acad. Sci. (USA), 75:6120-6124 (1978);

GETHING et al., "Protein Folding in the Cell", Nature, 355:33-45 (1992);

PAHL et al., "A Novel Signal Transduction Pathway from the Endoplasmic Reticulum to the Nucleus is Mediated by Transcription Factor NF-kappa B", EMBO J., 14:2580-2588 (1995);

WATOWICH et al., "Complex Regulation of Heat Shock- and Glucose-responsive Genes in Human Cells", Mol Cell Biol., 8:393-405 (1988);

DUKSIN et al., "Relationship of the Structure and Biological Activity of the Natural Homologues of Tunicamycin", J. Biol. Chem., 257:3105-3109 (1982);

MAHESHWARI et al., "Interferon Treatment Inhibits Glycosylation of a Viral Protein", Nature, 287:454-456 (1980);

MARTÍNEZ et al., "Tunicamycin Inhibits Capillary Endothelial Cell Proliferation by Inducing Apoptosis", Angiogenesis: From the Molecular to Integrative Pharmacology, abstract (2000);

P19850.A06

MARTÍNEZ et al., "N-glycosylation Inhibition on Endothelial Cell Proliferation and Viability", FASEB J., 12:231a (1998);

YOUDIM et al., "Isolated Chromaffin Cells from Adrenal Medulla Contain Primarily Monoamine Oxidase B", Science, 224:619-621 (1984);

YOUDIM et al., "Steroid Regulation of Monoamine Oxidase Activity in the Adrenal Medulla", FASEB J., 3:1753-1759 (1989);

BANERJEE et al., "Expression of Blood Clotting Factor VIII:C Gene in Capillary Endothelial Cells", FEBS Letts., 306:33-37 (1992);

MARTÍNEZ et al., "Expression of GLC₃Man₉GNAC₂-PP-Dol is a Prerequisite for Capillary Endothelial Cell Proliferation", Cell Molec. Biol., 45:137-152 (1999);

CAO et al., "Modified Method of Mammalian Cell Synchronization Improves Yield and Degree of Synchronization", Exp. Cell Res., 193:405-410 (1991);

MILLONIG, "Advantages of a Phosphate Buffer for Osmium Tetroxide Solutions in Fixation", J. Appl. Physics, 32:1637 (1961);

KRISHAN, "Rapid Flow Cytofluorometric Analysis of Mammalian Cell Cycle by Propidium Iodide Staining", J. Cell Biol., 66:188-193 (1975);

FIORELLI et al., "Cytokines from Activated T Cells Induce Normal Endothelial Cells to Acquire the Phenotypic and Functional Features of AIDS-Kaposi's Sarcoma Spindle Cells", J. Clin. Invest., 95:1723-1734 (1995); and

GRANVILLE et al., "Apoptosis: Molecular Aspects of Cell Death and Disease", Lab. Invest., 78:893-913 (1998).

P19850.A06

Applicants also bring to the attention of the Examiner the following documents:

MARTÍNEZ et al., "cAMP Blocks Apoptosis during Tunicamycin-induced Inhibition of Angiogenesis *in vitro*", FASEB Journal, 13:600 (1999);

MARTÍNEZ et al., "cAMP Rescues Unfolded Protein Response of Tunicamycin and Restores Cell-cycle Progression", FASEB Journal, 14:1308 (2000);

"OSI Pharmaceuticals Announces Initiation of Phase I Clinical Trial for Anti-Angiogenesis Agent", Press Release (2000);

MARTÍNEZ et al., "Tunicamycin Inhibits Capillary Endothelial Cell Proliferation by Inducing Apoptosis", Angiogenesis: From the Molecular to Integrative Pharmacology, 197-208 (2000);

MARTÍNEZ et al., "Tunicamycin Inhibits Angiogenesis by ER Stress", Glycobiology, 10:1131 (2000);

BANERJEE et al., "Mannosylphosphodolichol Synthase Activity is Associated with a 32 kDa Phosphoprotein", Bioscience Reports, 19:169-177 (1999);

Boehringer Mannheim Corporation, Tunicamycin Data Sheet¹

U.S. Patent 5,629,340;

U.S. Patent 5,807,731;

¹ Applicants note that this document is not dated. Applicants request that for the purpose of performing an action on the merits, the Examiner consider that this document to have a date prior to the effective filing date of the Applicants' application. If this document is utilized in a rejection, Applicants will try to obtain the date of the document, if necessary.

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U.S. Patent 5,932,611;

U.S. Patent 5,981,471;

U.S. Patent 6,051,230;

U.S. Patent 6,121,236; and

U.S. Patent 6,153,603.

Copies of the above-noted documents are enclosed together with a duly completed Form PTO-1449. The Examiner is accordingly requested to consider each of these documents, and to make them of record in this application by initialing in the appropriate spaces on the Form PTO-1449. Applicant respectfully requests that the Examiner include a copy of the initialed Form PTO-1449 with the next communication from the U.S. Patent and Trademark Office.

Applicants note that an Office Action on the Merits has not issued in the instant application. However, if an Office Action on the Merits has issued, and is crossing this statement in the mail, the undersigned hereby authorizes the Commissioner to charge any fee necessary for consideration of this statement, including any payment under 37 C.F.R. 1.17(p), to be charged to Applicants' Deposit Account No. 19-0089.

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Should there be any questions, the Examiner is invited to contact the undersigned at the below listed telephone number.

Respectfully submitted,
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